

therapeutically effective amount, or a prophylactically effective amount, of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

- 5 46. A method for treating or preventing epilepsy and partial and generalized tonic seizures in a patient in need thereof comprising administering to said patient a therapeutically effective amount, or a prophylactically effective amount, of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

TITLE OF THE INVENTION

3-FLUORO-PIPERIDINES AS NMDA/NR2B ANTAGONISTS

FIELD OF THE INVENTION

5 This invention relates to *N*-substituted nonarylheterocyclic compounds. In particular, this invention relates to *N*-substituted nonarylheterocyclic compounds that are NMDA NR2B antagonists useful for the treatment of Parkinson's disease and pain.

BACKGROUND OF THE INVENTION

10 Ions such as glutamate play a key role in processes related to chronic pain and pain-associated neurotoxicity – primarily by acting through N-methyl-D-aspartate (“NMDA”) receptors. Thus, inhibition of such action – by employing ion channel antagonists, particularly NMDA antagonists – can be beneficial in the treatment and control of Parkinson's disease and pain.

15 NMDA receptors are heteromeric assemblies of subunits, of which two major subunit families designated NR1 and NR2 have been cloned. Without being bound by theory, it is generally believed that the various functional NMDA receptors in the mammalian central nervous system (“CNS”) are only formed by combinations of NR1 and NR2 subunits, which respectively express glycine and glutamate recognition sites. The NR2 subunit family is in turn divided into four individual subunit types: NR2A, NR2B, NR2C, and NR2D. T. Ishii, et al., *J. Biol. Chem.*, 268:2836-2843 (1993), and D.J. Laurie et al., *Mol. Brain Res.*, 51:23-32 (1997) describe how the various resulting combinations produce a variety of NMDA receptors differing in physiological and pharmacological properties such as ion gating properties, magnesium sensitivity, pharmacological profile, as well as in anatomical distribution.

20 For example, while NR1 is found throughout the brain, NR2 subunits are differentially distributed. In particular, it is believed that the distribution map for NR2B lowers the probability of side effects while treating Parkinson's disease or pain. Thus, it would be desirable to provide novel NMDA
25 antagonists that target the NR2B receptor.